

**TRIPOLI EAST VEGETATION MANAGEMENT PROJECT**

**TOWNS OF LIVERMORE AND THORNTON, GRAFTON CO., NH**

**APPENDIX G**

**G1 - PROBABILITY OF OCCURRENCE OF NH STATE-LISTED THREATENED (T),  
ENDANGERED (E), AND SPECIES-OF-SPECIAL-CONCERN (SSC) PLANTS**

**G2 - PROBABILITY OF OCCURRENCE AND EFFECTS ANALYSIS FOR SPECIES  
OF OTHER CONCERN ON THE WMNF**

**APPENDIX G1. Probability Of Occurrence Of NH State-Listed Threatened (T), Endangered (E) & Species-of-Special-Concern (SSC) Plants For The Tripoli East Vegetation Management Project Area, Grafton County, NH.**

<b>Species</b>	<b>Status</b>	<b>Habitat Requirements</b>	<b>Is Suitable Habitat Present Within The Project Area ?</b>	<b>Documented Occurrence</b>	<b>Probability Of Occurrence</b>
<b>Alpine Bearberry</b> , <i>Arctostaphylos alpina</i>	T	Alpine Zone in the Presidential Range. <sup>1</sup>	No	No	None
<b>Ciliated Aster</b> , <i>Symphotrichum ciliolatus</i>	T	Woods and clearings. <sup>2</sup>	Yes	No	Low
<b>American Winter-Cress</b> <i>Barbarea orthoceras</i>	E	Moist habitats, streambanks, and wet rocks in alpine regions of New Hampshire. <sup>1</sup>	No	No	None
<b>Dwarf Birch</b> , <i>Betula glandulosa</i>	T	Acidic alpine soils of the Presidential Range. <sup>1</sup>	No	No	None
<b>Pickering's Reedgrass</b> <i>Calamagrostis pickeringii</i>	T	Cobbled riverside sand/gravel barrens adjacent to high energy rivers. <sup>5</sup>	No	No	None.
<b>Neglected Reed</b> <i>Calamagrostis stricta var inexpansa</i>	E	Wet meadows and marshes. <sup>2</sup>	No	No	None
<b>Walking-Fern Spleenwort</b> <i>Camptosorus rhizophyllus</i>	E	Mostly on rocks, especially on limestone. <sup>2</sup>	Marginal- limestone not known to occur in the Project Area.	No	Very low to None
<b>Bebb's Sedge</b> , <i>Carex bebbii</i>	T	Wet meadows and shores, especially in calcareous soils. <sup>2</sup>	Marginal-no wet meadows or calcareous soils.	No	None
<b>Inflated Sedge</b> , <i>Carex bullata</i>	E	Swamps and bogs, mainly on the coastal plain. <sup>2</sup>	No	No	None
<b>Hair-Like Sedge</b> <i>Carex capillaris ssp capillaris</i>	T	Streambanks, wet meadows, and wet ledges of alpine zones. <sup>1,2</sup>	No	No	None
<b>Head-Like Sedge</b> <i>Carex capitata ssp arctogena</i>	T	Arctic and alpine environments on peats and gravels. <sup>1,2</sup>	No	No	None
<b>Scirpus-Like Sedge</b> , <i>Carex scirpoidea</i>	T	Dry, calcareous soils in the subalpine, or on ledges. <sup>1,2</sup>	No	No	None
<b>Hidden Sedge</b> , <i>Carex umbellate</i>	E	Dry to moist sites in sun or shade. <sup>2</sup>	Yes	No	Low
<b>Wild Senna</b> , <i>Cassia hebecarpa</i>	E	Moist open woods, roadsides, & streambanks in southern NH. <sup>2</sup>	No	No	None
<b>Moss Bell-Heather</b> <i>Harrimanella hypnoides</i>	T	Alpine summits and the north shore of Lake Superior. <sup>2</sup>	No	No	None
<b>Pale Painted-cup</b> <i>Castilleja septentrionalis</i>	T	Moist peaty or gravelly calcareous soils in subalpine ravines. <sup>1,2</sup>	No	No	None
<b>Bosc's Pigweed</b> , <i>Chenopodium boscianum</i>	E	Dry rocky woods, thickets, clearings & roadsides. <sup>1,2</sup>	Yes	No	Low
<b>Squaw-Root</b> , <i>Conopholis americana</i>	T	Deciduous woods, parasitic on tree roots. <sup>1</sup>	Yes	No	Low
<b>Northern Wild Comfrey</b> <i>Cynoglossum virginianum var. boreale</i>	E	Open woods & clearing, disturbed sites, somewhat weedy. <sup>2</sup>	Yes	No	Low
<b>Small Yellow Lady's-Slipper</b> <i>Cypripedium parviflorum</i>	E	Moist to wet low areas. <sup>2</sup>	Yes	No	Low
<b>Large Yellow Lady's-Slipper</b> <i>Cypripedium pubescens</i>	T	Mesic woods. <sup>2</sup>	Yes	No	Low
<b>Cut-leaf Toothwort</b> <i>Cardamine concatenata</i>	E	Moist, rich woods <sup>2</sup>	No	No	None
<b>Lapland Diapensia</b> , <i>Diapensia lapponica</i>	T	Barren areas of alpine regions. <sup>1</sup>	No	No	None
<b>Fragrant Fern</b> , <i>Dryopteris fragrans</i>	T	Cliff crevices, often on limestone. <sup>1</sup>	No	No	None

**APPENDIX G1. Probability Of Occurrence Of NH State-Listed Threatened (T), Endangered (E) & Species-of-Special-Concern (SSC) Plants For The Tripoli East Vegetation Management Project Area, Grafton County, NH.**

<b>Species</b>	<b>Status</b>	<b>Habitat Requirements</b>	<b>Is Suitable Habitat Present Within The Project Area ?</b>	<b>Documented Occurrence</b>	<b>Probability Of Occurrence</b>
<b>Purple Crowberry</b> <i>Empetrum atropurpureum</i>	T	Gravels and Sands on the lower mountains. <sup>1</sup>	Yes	No	Low
<b>Black Crowberry</b> , <i>Empetrum nigrum</i>	T	Heaths of the alpine zone. <sup>1</sup>	No	No	None
<b>Ciliated Willow-herb</b> , <i>Epilobium ciliatum</i>	T	Wet rocks and ledges at high altitudes. <sup>1</sup>	No	No	None
<b>Hornemann Willow-Herb</b> <i>Epilobium hornemannii</i>	T	Alpine brooks and ravines. <sup>1</sup>	No	No	None
<b>Marsh Horsetail</b> , <i>Equisetum palustre</i>	T	Streambanks, wet meadows, and marshes. <sup>2</sup>	No	No	None
<b>Meadow Horsetail</b> , <i>Equisetum pratense</i>	T	Streambanks and moist woods. <sup>2</sup>	Yes	No	Low
<b>Labrador Bedstraw</b> <i>Galium labradoricum</i>	E	Cold bogs, swamps, and wet thickets. <sup>2</sup>	No	No	None
<b>Hairy Hudsonia</b> , <i>Hudsonia tomentosa</i>	T	Costal dunes and inland sandy habitats. <sup>2</sup>	No	No	None
<b>Large-Spored Quillwort</b> <i>Isoetes macrospora</i>	T	Submerged in cold ponds, lakes, and streams, rooted in gravel. <sup>2</sup>	Yes in streams.	No	Very Low
<b>Alpine Azalea</b> , <i>Loiseleuria procumbens</i>	T	Barren areas of the alpine region. <sup>1</sup>	No	No	None
<b>Northern Woodrush</b> , <i>Luzula confusa</i>	E	Alpine & arctic meadows and hillside on the higher mountains. <sup>2</sup>	No	No	None
<b>Spiked Woodrush</b> , <i>Luzula spicata</i>	T	Arctic & alpine meadows, ledges& slopes on high mountains. <sup>2</sup>	No	No	None
<b>Green Adder's-Mouth</b> , <i>Malaxis unifolia</i>	T	Variety of habitat from dry hilltops to moist swamps, under open sun to dense shade, often in sandy-acidic soils. <sup>3</sup>	Marginal-Limited sandy, acidic soils.	No	Very Low
<b>Climbing Hempweed</b> , <i>Mikania scandens</i>	T	Climbing on bushes in moist places. <sup>2</sup>	No	No	No
<b>Millet-Grass</b> , <i>Milium effusum</i>	T	Rich, moist or dry woods. <sup>2</sup>	Yes	No	Low
<b>Smooth Sandwort</b> , <i>Minuartia glabra</i>	T	Rocky places on the higher mountains of New Hampshire. <sup>2</sup>	No	No	None
<b>Rock Sandwort</b> , <i>Minuartia stricta</i>	E	Rocky, gravelly, often calcareous soils. <sup>2</sup>	No known calcareous soils.	No	Very Low
<b>Mountain Sorrel</b> , <i>Oxyria digyna</i>	T	Very moist habitats in alpine ravines. <sup>1</sup>	No	No	None
<b>Alpine Timothy</b> , <i>Phleum alpinum</i>	T	Alpine meadows. <sup>1</sup>	No	No	None
<b>Mountain-Heath</b> , <i>Phyllodoce caerulea</i>	T	Alpine summits. <sup>2</sup>	No	No	None
<b>Common Butterwort</b> , <i>Pinguicula vulgaris</i>	E	Wet rocks along shores, bogs, and wet meadows. <sup>2</sup>	No	No	None
<b>Jack Pine</b> , <i>Pinus banksiana</i>	T	Dry or sterile sandy or rocky soil. <sup>2</sup>	Yes	No	Very Low
<b>White Bluegrass</b> , <i>Poa glauca</i>	T	Gravelly or rocky soil and on cliffs. <sup>2</sup>	No	No	None
<b>Alpine Meadow Grass</b> <i>Poa arctica ssp arctica</i>	E	Alpine meadows. <sup>1</sup>	No	No	None
<b>Douglas' Knotweed</b> , <i>Polygonum douglasii</i>	T	Rocky ledges or slopes in dry soil. <sup>1</sup>	No	No	None
<b>Viviparous Knotweed</b> <i>Polygonum viviparum</i>	T	Moist alpine meadows. <sup>1</sup>	No	No	None
<b>Baked Apple Berry</b> , <i>Rubus chamaemorus</i>	E	Alpine peats, bogs, and heaths. <sup>1</sup>	No	No	None
<b>Silver Willow</b> , <i>Salix argyrocarpa</i>	T	Moist soils in alpine or subalpine meadows and ravines. <sup>1</sup>	No	No	None
<b>Dwarf Willow</b> , <i>Salix herbacea</i>	T	Moist alpine ravines, particularly in areas with late-lying snow. <sup>1</sup>	No	No	None
<b>Satin Willow</b> , <i>Salix pellita</i>	T	Alluvial or gravelly riverbanks, shores, or swamps. <sup>2</sup>	No	No	None
<b>Tea-Leaved Willow</b> , <i>Salix planifolia</i>	T	Arctic or alpine areas in moist soils, and near stream banks. <sup>1</sup>	No	No	None
<b>Nodding Saxifrage</b> , <i>Saxifraga cernua</i>	E	Moist ledges and cliffs in Alpine habitats. <sup>1</sup>	No	No	None

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Species	Status	Habitat Requirements	Is Suitable Habitat Present Within The Project Area ?	Documented Occurrence	Probability Of Occurrence
<b>Alpine Brook Saxifrage</b> <i>Saxifraga rivularis</i>	E	Moist alpine soils, often at the head of moist alpine ravine, also moist soils in rock crevices in disturbed areas. <sup>1</sup>	No	No	None
<b>Many Leaved Bulrush</b> <i>Scirpus polyphyllus</i>	E	Swamps and wet woods. <sup>1</sup>	Marginal, limited occurrence of wet woods.	No	Very Low
<b>Arizona Cinquefoil</b> <i>Sibbaldia procumbens</i>	E	Steep, moist meadows in Alpine regions. <sup>1</sup>	No	No	None
<b>Cutler's Goldenrod</b> , <i>Solidago cutleri</i>	T	Alpine habitats. <sup>2</sup>	No	No	None
<b>Pursh's Goldenrod</b> , <i>Solidago purshii</i>	T	Bogs with calcareous soils. <sup>2</sup>	No	No	None
<b>Canadian Germander</b> <i>Teucrium canadense var virginicum</i>	T	Moist or wet soil near streams and ponds. <sup>2</sup>	Yes	No	Low
<b>Bilberry</b> <i>Vaccinium uliginosum var alpinum</i>	T	Heath communities of the alpine zone. <sup>1</sup>	No	No	None
<b>Alpine Speedwell</b> , <i>Veronica wormskjoldii</i>	E	Moist open slopes, meadows, bogs, streambanks, in NH mtns. <sup>2</sup>	Yes	No	Low
<b>Pale Early Violet</b> , <i>Viola affinis</i>	E	Moist wet places, in disturbed somewhat weedy sites. <sup>2</sup>	Yes	No	Low
<b>Kidney-leaved Violet</b> , <i>Viola nephrophylla</i>	T	Cold wet places, often with a high soil pH. <sup>2</sup>	Soil pH typically low in PA.	No	Low
<b>Alpine Marsh Violet</b> , <i>Viola palustris</i>	T	Alpine regions of New Hampshire. <sup>1,2</sup>	No	No	None
<b>SPECIES OF SPECIAL CONCERN</b>					
<b>Grass Pink</b> , <i>Calopogon tuberosus</i>	SSC	Unshaded fens, soggy marl flats, lush mats of sphagnum moss. <sup>3</sup>	No	No	None
<b>Flowering Dogwood</b> , <i>Cornus florida</i>	SSC	Rich well-drained soils in acidic woods to 5,000 feet. An understory tree in dry deciduous woods. <sup>4</sup>	Marginal- No rich woods	No	Very Low
<b>Pink lady's Slipper</b> , <i>Cypripedium acaule</i>	SSC	Higher and dryer coniferous woods, often in a thin layer of pine needles over rocks, sometimes in bogs and wet places. <sup>3,4</sup>	Yes	No	Very Low
<b>Dutchman's Breeches</b> , <i>Dicentra cucullaria</i>	SSC	Cool places in rich mountain woods. <sup>4</sup>	Marginal- No rich woods	No	Very Low
<b>Trailing Arbutus</b> , <i>Epigaea repens</i>	SSC	Sandy and peaty woods and clearings, usually under pine trees. <sup>4</sup>	Marginal- Limited pine forest	No	Very Low
<b>Mountain Laure</b> , <i>Kalmia latifolia</i>	SSC	Rich rocky, or dry gravelly woods in the shade of deciduous trees, and swamps in acid soils. Prefers sandy or rocky soils. <sup>4</sup>	Marginal- No rich woods	No	Very Low
<b>White-Fringed Orchid</b> <i>Platanthera blephariglottis</i>	SSC	Sphagnum bogs and peat wetlands, mixed forest region. <sup>3</sup>	Marginal- No sphagnum bogs	No	Very Low
<b>Large Purple-fringed Orchid</b> <i>Platanthera grandifolia</i>	SSC	Low deciduous woods, grassy meadows, ditches and acidic swamps. <sup>3</sup>	Marginal- Limited acidic swamps	No	Very Low
<b>Rose Pogonia</b> , <i>Pogonia ophioglossoides</i>	SSC	Open heath-sphagnum bogs, sometimes in calcareous marshes. <sup>3</sup>	No	No	None
<b>Lapland Rosebay</b> <i>Rhododendron lapponicum</i>	SSC	Rocky barrens and sub-alpine woods	No	No	None
<b>Pitcher Plant</b> , <i>Sarracenia purpurea</i>	SSC	Sphagnum bogs and peaty barrens. <sup>4</sup>	No	No	None

<sup>1</sup> = Storks and Crow (1979)      <sup>2</sup> = Gleason and Cronquist (1991)      <sup>3</sup> = Royal Botanical Gardens (2000)      <sup>4</sup> = Plants For A Future (2000)      <sup>5</sup> = Engstrom and Sperduto (1994, 96)  
Occurrence also considered ELTs and forest types present.

Table G2 addresses species identified during the Forest Plan Revision Process having a potential viability concern on the White Mountain National Forest. These species are not listed on the current Regional Forester's Sensitive Species (R9SS) list for the WMNF (USDA-FS 2000). The probability of occurrence and potential effects on some of the plant and wildlife species shown in Table G2 below were already addressed in the EA Appendices E, F, and/or G1.

<b>G2. PROBABILITY OF OCCURRENCE AND EFFECTS ANALYSIS FOR SPECIES OF OTHER CONCERN ON THE WMNF</b>				
<b>Species</b>	<b>Habitat Requirements</b>	<b>Suitable Habitat Present Within the Project Area?</b>	<b>Documented &amp; / or Suspected Occurrence In Project Area?</b>	<b>Would Alternatives Adversely Affect Species or Habitat?</b>
<b>MAMMALS</b>				
<b>American Marten</b> <i>Martes americana</i>	See EA Wildlife Section and Appendix F1 and F3.	See EA Wildlife Section and Appendix F1, F2, F3.	See EA Wildlife Section and Appendix F1, F2, F3.	No. See EA Appendix F3 & effects analysis in EA Wildlife Section.
<b>BIRDS</b>				
<b>Bay-breasted Warbler</b> <i>Dendroica castanea</i>	Primarily mature coniferous forests (mixed forests used) up to 4000'. Prefers the thick lower vegetation at edges of small forest openings.	Mature spruces / fir community type and mixed forest is present. Few thick edges of forest openings.	Suspect could occur within the Project Area.	No. Action alternatives would perpetuate spruce/fir type and create openings with thick lower vegetation at edge of treatments.
<b>Rusty Blackbird</b> <i>Euphagus carolinus</i>	Prefers northern ponds, wetlands, beaver ponds typically between 1000' to 4000' in elev. Nests found in spruce and fir.	Ponds & beaver ponds are located outside the Project Area. There are no wetlands within the Project Area.	Not expected to occur within the Project Area due to non-suitable habitat.	No. No Action and all action alternatives would not affect this species or suitable habitat.
<b>Three-toed Woodpecker</b> <i>Picoides tridactylus</i>	See EA Appendix F2 and F3.	See EA Appendix F2 and F3.	See EA Appendix F2 and F3.	See EA Appendix F3 for analysis of potential effects.
<b>Pied-billed Grebe</b> <i>Podilymbus podiceps</i>	See EA Appendix F2.	See EA Appendix F2.	See EA Appendix F2	No. No Action or all action alternatives would not affect this species or suitable habitat.
<b>AMPHIBIANS</b>				
<b>Jefferson Salamander</b> <i>Ambystoma jeffersonianum</i>	See EA Aquatics Section and Appendix F2 and F3.	See EA Aquatics Section and Appendix F2 and F3.	See EA Aquatics Section and Appendix F2 and F3.	See effects analysis in the EA Wildlife Section and Appendix F3.
<b>FISH</b>				
<b>Atlantic salmon</b> <i>Salmo salar</i>	See EA Aquatics Section and Appendix F2.	See EA Aquatics Section and Appendix F2.	See analysis in EA Aquatics Section and Appendix F2.	See effects analysis in EA Aquatics Section and Appendix F2.
<b>INVERTEBRATES (INSECTS)</b>				
<b>Boulder Beach Tiger Beetle</b> <i>Cicindela ancocisconensis</i>	Open sand / mix sand & cobble of mid-sized rivers; feed & live on sandy areas exposed by receding rivers; common in Saco River downstream of WMNF.	There are no exposed sandy areas of receding mid-sized rivers within the Project Area.	Not expected to occur within the Project Area due no suitable habitat present.	No. No Action and all action alternatives would not affect this species or suitable habitat.
<b>Black lordithon rove beetle</b> <i>Lordithon niger</i>	Old growth northern hardwood or mixed coniferous forest below 2,500'. Presently known from The Bowl RNA.	There is mature and over-mature northern hardwood and spruce / fir habitat present within the Project Area.	Suspect could occur within the mature and over-mature hardwood and spruce /fir community type within the Project Area.	No. Action alternatives would perpetuate the hardwood & spruce / fir type. Much of the harvest activity is proposed during winter season when beetles are dormant.
<b>A big-headed fly</b> <i>Nephrocerus slossonae</i>	Old growth northern hardwood or mixed coniferous forest above 1,500'. Non-aquatic. Presently known from The Bowl RNA.	There is mature and over-mature northern hardwood habitat present within the Project Area.	Suspect could occur within the mature and over-mature hardwood community type within the Project Area.	No. Action alternatives would perpetuate the hardwood & spruce / fir type. Much of the harvest activity is proposed during winter season when flies are dormant.
<b>INVERTEBRATES (ODONATES)</b>				
<b>Southern Pygmy Clubtail</b> <i>Lanthus vernalis</i>	Small, shady spring-fed creeks with clean sandy or mud substrates & shallow water.	Streams within Project Area have gravel, cobble, & boulder substrates.	Not expected to occur due to non-suitable habitat.	No. No Action and all action alternatives would not affect this species or suitable habitat.

**G2. PROBABILITY OF OCCURRENCE AND EFFECTS ANALYSIS FOR SPECIES OF OTHER CONCERN ON THE WMNF**

<b>Species</b>	<b>Habitat Requirements</b>	<b>Suitable Habitat Present Within the Project Area?</b>	<b>Documented &amp; / or Suspected Occurrence In Project Area?</b>	<b>Would Alternatives Adversely Affect Species or Habitat?</b>
<b>Forcipate emerald</b> <i>Somatochlora forcipata</i>	Spring-fed steamlets in subalpine hillside fens with floating vegetation or pools with flowing groundwater in fen areas. Avoid open, sunny fen areas. Eggs laid in mud-bottomed pools.	There is no sub-alpine hillside fens within the Project Area.	Not expected to occur due to non-suitable habitat within the Project Area.	No. No Action and all action alternatives would not affect this species or suitable habitat.
<b>Ebony boghunter</b> <i>Williamsonia fletcheri</i>	Low elevation sphagnum bogs adjacent to coniferous or mixed coniferous/deciduous forested areas. Absent from most bogs without sphagnum. Larvae develop in shallow pools (6" - 12") in sedge fens or among sphagnum mats with open pools not choked with heaths. Uses openings in forest rather than completely open upland habitat.	There is no low elevation sphagnum bogs adjacent to coniferous or mixed coniferous / deciduous forested areas within the Project Area.	Not expected to occur due to non-suitable habitat within the Project Area.	No. No Action and all action alternatives would not affect this species or suitable habitat.
<b>PLANTS</b>				
<b>Arabis missouriensis</b> <i>Arabis missouriensis</i>	Semi-open richer sites in the WMNF. Typically south or west-facing slopes below 1500'. Associated spp include red oak, ash, basswood, sugar maple.	The majority of the Project Area is above 1,500 feet and there is no red oak or basswood.	Not expected to occur due to non-suitable habitat	No. No Action and all action alternatives would not affect this species or suitable habitat.
<b>Pickering's Reed Bent-grass</b> <i>Calamagrostis pickeringii</i>	See EA Appendix G1.	See EA Appendix G1.	See EA Appendix G1.	No. See EA Appendix G1. No Action & all action alternatives would not affect species or suitable habitat.
<b>Cut-leaved Toothwort</b> <i>Cardamine concatenata</i>	See EA Appendix G1.	See EA Appendix G1.	See EA Appendix G1.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Rocky Mountain Sedge</b> <i>Carex backii</i>	Shady calcareous to neutral, dry-mesic, rocky oak-hardwood and limestone hardwood habitat.	There is no rocky oak hardwood and limestone hardwood habitat within the Project Area.	Not expected to occur due to non-suitable habitat.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Hair-like Sedge</b> <i>Carex capillaris</i>	See EA Appendix G1.	See EA Appendix G1.	See EA Appendix G1.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Head-like Sedge</b> <i>Carex capitata ssp. Arctogena</i>	See EA Appendix G1.	See EA Appendix G1.	See EA Appendix G1.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Scirpus-like Sedge</b> <i>Carex scirpoidea</i>	See EA Appendix G1.	See EA Appendix G1.	See EA Appendix G1.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Pale Painted-cup</b> <i>Castilleja septentrionalis</i>	See EA Appendix G1.	See EA Appendix G1.	See EA Appendix G1.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Northern Wild Comfrey</b> <i>Cynoglossum virginianum var. boreale</i>	Occurs in enriched n. hardwood or mesic red oak n. hardwood, or transition limestone hardwood forests. Mainly in rich mesic woods on sandy or rocky soil with understory light. Favors southern & western aspects. May occur on ledges.	There is no red oak or limestone hardwood forests or sandy rocky ledges within the Project Area. There is northern hardwood habitat present.	Suspect could occur in the northern hardwood type.	No. See effects to plants disclosed in the EA Vegetation Section and Appendix E Vegetation Report. No Action & all action alternatives would not adversely affect species or suitable habitat.

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<b>Species</b>	<b>Habitat Requirements</b>	<b>Suitable Habitat Present Within the Project Area?</b>	<b>Documented &amp; / or Suspected Occurrence In Project Area?</b>	<b>Would Alternatives Adversely Affect Species or Habitat?</b>
<b>Yellow Lady's-Slipper</b> <i>Cypripedium parviflorum var. pubescens</i>	See EA Vegetation Section and Appendix E and G1.	See EA Vegetation Section and Appendix E and G1.	Suspect could occur in portions of the Project Area. See EA Vegetation Section and Appendix E and G1.	No. See effects to plants in the EA Vegetation Section and Appendix E Vegetation Report. No Action & all alternatives would not adversely affect species or suitable habitat.
<b>Moss Bell-heather</b> <i>Harrimanella hypnoides</i>	Snowbank communities, wet seeps, ledges, and crevices in alpine habitats.	There are no snowbank, wet seeps, ledges, crevices or alpine habitats.	Not expected to occur due to no suitable habitat present.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Alpine Azalea</b> <i>Loiseleuria procumbens</i>	See EA Appendix G1.	See EA Appendix G1.	See EA Appendix G1.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Northern Woodrush</b> <i>Luzula confusa</i>	See EA Appendix G1.	See EA Appendix G1.	See EA Appendix G1.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Smooth Sandwort</b> <i>Minuartia glabra</i>	See EA Appendix G1.	See EA Appendix G1.	See EA Appendix G1.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Prairie Goldenrod</b> <i>Oligoneuron album</i>	Occurs mostly on dry, calcareous cliffs & ledges or open fields & roadsides. NH sites are on calcareous soil or bedrock.	There are no calcareous cliffs and ledges or bedrock within the Project Area.	Not expected to occur due to no-suitable habitat present.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Mountain Sorrel</b> <i>Oxyria digyna</i>	See EA Appendix.	See EA Appendix G1.	See EA Appendix G1.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Alpine Timothy</b> <i>Pheleum alpinum</i>	See EA Appendix G1.	See EA Appendix G1.	See EA Appendix G1.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Jack Pine</b> <i>Pinus banksiana</i>	See EA Appendix G1.	See EA Appendix G1.	See EA Appendix G1.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Alpine Meadow Grass</b> <i>Poa arctica ssp. arctica</i>	See EA Appendix.G1.	See EA Appendix G1.	See EA Appendix G1.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Douglas knotweed</b> <i>Polygonum douglasii</i>	See EA Appendix G1.	See EA Appendix G1.	See EA Appendix G1.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Viviparous Knotweed</b> <i>Polygonum viviparum</i>	See EA Appendix G1.	See EA Appendix G1.	See EA Appendix G1.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Algae-like Pondweed</b> <i>Potamogeton confervoides</i>	Strongly acidic soft-water bogs, lakes & ponds at various elevations. Found in slow-flowing acidic streams & muddy shores with ample vegetation; found at depths ≤ 15' or deeper. Not known to occur in beaver ponds.	No strongly acidic soft-water bogs, lakes & ponds at various elevations or slow-flowing acidic streams or muddy shores with lots of vegetation within Project Area.	Not expected to occur due to no suitable habitat present.	No. No Action & all action alternatives would not affect species or suitable habitat.
<i>Rhinanthus minor ssp. minor</i>	Dry-mesic heath communities and wet meadows in alpine/subalpine zone.	No dry-mesic heath or wet meadows in alpine/subalpine zone present.	Not expected to occur due to no suitable habitat present.	No. No Action & all action alternatives would not affect species or suitable habitat.

**G2. PROBABILITY OF OCCURRENCE AND EFFECTS ANALYSIS FOR SPECIES OF OTHER CONCERN ON THE WMNF**

<b>Species</b>	<b>Habitat Requirements</b>	<b>Suitable Habitat Present Within the Project Area?</b>	<b>Documented &amp; / or Suspected Occurrence In Project Area?</b>	<b>Would Alternatives Adversely Affect Species or Habitat?</b>
<b>Lapland Rosebay</b> <i>Rhododendron lapponicum</i>	See EA Appendix G1.	See EA Appendix G1.	See EA Appendix G1.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Silverleaf Willow</b> <i>Salix argyrocarpa</i>	See EA Appendix G1.	See EA Appendix G1.	See EA Appendix G1.	No. No Action & all action alternatives would not affect species or suitable habitat..
<b>Dwarf Willow</b> <i>Salix herbacea</i>	See EA Appendix G1.	See EA Appendix G1.	See EA Appendix G1.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Satin Willow</b> <i>Salix pellita</i>	See EA Appendix e.	See EA Appendix G1.	See EA Appendix G1.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Three-leaved Black Snake Root</b> <i>Sanicula trifoliata</i>	Limy deciduous woods below 1500'. Most occurrences on steep slopes. Associates w/ dense lush ground cover & relatively closed canopy. Found near clearcuts & cliffs indicating takes advantage of sunny sites	There are no limy deciduous woods below 1500' or dense lush ground cover within the Project Area.	Not expected to occur due to no suitable habitat present.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Alpine Brook Saxifrage</b> <i>Saxifraga rivularis</i>	See EA Appendix G1.	See EA Appendix G1.	See EA Appendix G1.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Arizona cinquefoil</b> <i>Sibbaldia procumbens</i>	See EA Appendix G1.	See EA Appendix G1.	See EA Appendix G1.	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Rock Goldenrod</b> <i>Solidago calcicola</i>	Moist rich woods, rocky or gravelly thickets, talus and cliffs.	No moist rich woods, rocky or gravelly thickets, talus and cliffs.	Not expected to occur due to no suitable habitat present.	No. No Action & all action alternatives would not affect species or suitable habitat..
<b>Alpine Meadow-sweet</b> <i>Spirea septentrionalis</i>	Cool wet ravine alpine and subalpine habitats.	No cool wet ravine alpine and subalpine habitats.	Not expected to occur due to no suitable habitat present	No. No Action & all action alternatives would not affect species or suitable habitat..
<b>Ciliated Aster</b> <i>Symphotrichum ciliolatum</i>	Open woods & dry to moist thickets, shores, clearings; occurs in openings in pine barrens & dry n. hardwood & red spruce hardwood forest, & clearings & roadsides. Prefers scattered small or large openings in the forest canopy, not necessarily early-successional habitat. Found in soils & rocky sites.	Open woods & dry northern hardwood forest, roadsides & scattered small openings in the forest canopy present.	Suspect could occur within the northern hardwood community type and roadsides within the Project Area.	No. See EA Vegetation Section and Appendix E Vegetation Report. Action alternatives would perpetuate the hardwood type. Much of the harvest activity is proposed during winter season when plants are dormant.
<b>Narrow False Oats</b> <i>Trisetum spicatum</i>	Open, relatively exposed habitats; often associated with rock ledges, crevices, and waterfalls. Dry-mesic heath and snowbank / wet ravine alpine / subalpine communities.	No rock ledges, crevices, and waterfalls or dry -mesic heath and snowbank / wet ravine alpine / subalpine communities.	Not expected to occur due to non-suitable habitat	No. No Action & all action alternatives would not affect species or suitable habitat.

**G2. PROBABILITY OF OCCURRENCE AND EFFECTS ANALYSIS FOR SPECIES OF OTHER CONCERN ON THE WMNF**

<b>Species</b>	<b>Habitat Requirements</b>	<b>Suitable Habitat Present Within the Project Area?</b>	<b>Documented &amp; / or Suspected Occurrence In Project Area?</b>	<b>Would Alternatives Adversely Affect Species or Habitat?</b>
<b>Northeastern bladderwort</b> <i>Utricularia resupinata</i>	Pond, lake and bog shores and margins as well as some wet ditches. Prefers clear, acidic waters with sandy, muddy, or peaty shores. May require low water levels to bloom, and needs a slightly higher than average water temperature.	No pond, lake, bog shores, margins or wet ditches or clear, acidic waters with sandy, muddy, or peaty shores.	Not expected to occur due to non-suitable habitat	No. No Action & all action alternatives would not affect species or suitable habitat.
<b>Mountain hairgrass</b> <i>Vahlodea atropurpurea</i>	In northern New England, is limited to the alpine / subalpine zone, especially herbaceous snowbanks communities.	No alpine / subalpine zone, especially herbaceous snowbanks communities.	Not expected to occur due to non-suitable habitat	No. No Action & all action alternatives would not affect species or suitable habitat..

For information on Regional Forester R9-listed Sensitive Species (USDA-FS 2000), see the BE/BA as amended with Supplemental Information Reports in the Project File.